Check List the journal of biodiversity data

NOTES ON GEOGRAPHIC DISTRIBUTION

Check List 11(6): 1792, 11 November 2015 doi: http://dx.doi.org/10.15560/11.6.1792
ISSN 1809-127X © 2015 Check List and Authors

A new record of Lewis's Woodpecker, *Melanerpes lewis* (Gray, 1849) (Aves, Picidae) from Chihuahua, with comments on its status in Mexico

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Abstract: We present a new record of Lewis's Woodpecker, *Melanerpes lewis* (Gray, 1849), a rare winter visitor to northern Mexico, in a riparian-grassland corridor at La Regina, Buenaventura Municipality, Chihuahua, on 11–12 January 2014. The record represents the fourth record of this species in the state, and the first record for both the northern portion of the Chihuahua region and the Mexican ecoregion level IV "Foothills and Plains with grasslands, xerophytic scrub and conifer oak forests". We also comment on its current status and distribution in Mexico.

Key words: ecoregion, La Regina, out-of-range, Picidae, range extension, rare winter visitor, riparian-grassland corridor

The Lewis's Woodpecker, *Melanerpes lewis* (Gray, 1849), breeds from western North America along the coastal ranges from southern British Columbia to Arizona and New Mexico, reaching the eastern portion of South Dakota, Wyoming and Colorado (Winkler et al. 1995). Its winter range includes Oregon, British Columbia, and western Texas; although it has also been found very irregularly in northern Mexico (Howell and Webb 1995; Winkler et al. 1995). Relatively few data exists on the geographical distribution of *M. lewis* in Mexico (Howell and Webb 1995).

As part of a bird monitoring project, we surveyed birds at the La Regina (29°40′14.19″N, 107°05′01.64″W; at 1,570 m above sea level; Figure 1) from May 2013 to November 2014. We performed six visits: May, October and December 2013, and January, July, and November 2014 (2 days of field work every visit), surveying all seasons of the year. We plotted a search area of 2 km² at La Regina employing a geographical information system (ArcGIS 9.3, ESRI, Redlands, CA). The data were gathered using the "area-search method" which consisted of three 20-min counts in which the observers walked around the sampling point (by this approach, 2 km² of radius; Ralph et al. 1993). Observation time was conducted at the study area according to bird activity peak, between 6:00–11:00 and 16:30–18:30. Through this approach, unfamiliar songs and calls could be tracked down and silent birds could be found. The birds detected were identified using binoculars (10x25) and a field guide (Howell and Webb 1995).

The study area is located in the southern portion of Buenaventura Municipality, Chihuahua, Mexico. It is bordered on the west by the municipalities of Galeana and Ignacio Zaragoza, south Namiquipa, east Ahumada, and west Nuevo Casas Grandes. The climate is dry and temperate with rainy summers (July to September). The mean monthly temperature varies from 8 to 18°C, and annual precipitation ranges between 200–600 mm (INEGI 2010). La Regina is bordered by grasslands and the principal grass constituents are perennial sod forming species such as grama (*Bouteoloa* sp.). Also, tarbush (*Flourensia* sp.) and creosote bush (*Larrea tridentata*) are characteristic plants of the Chihuahuan desert that have invaded extensive areas and continue to increase today; they readily replace the native grasses, as in the case of mesquite (*Prosopis* sp.). Other important plant community components of semidesert grassland include various cacti such as barrel-shaped cacti (*Ferocactus* sp.; Brown 1994). To the east of the

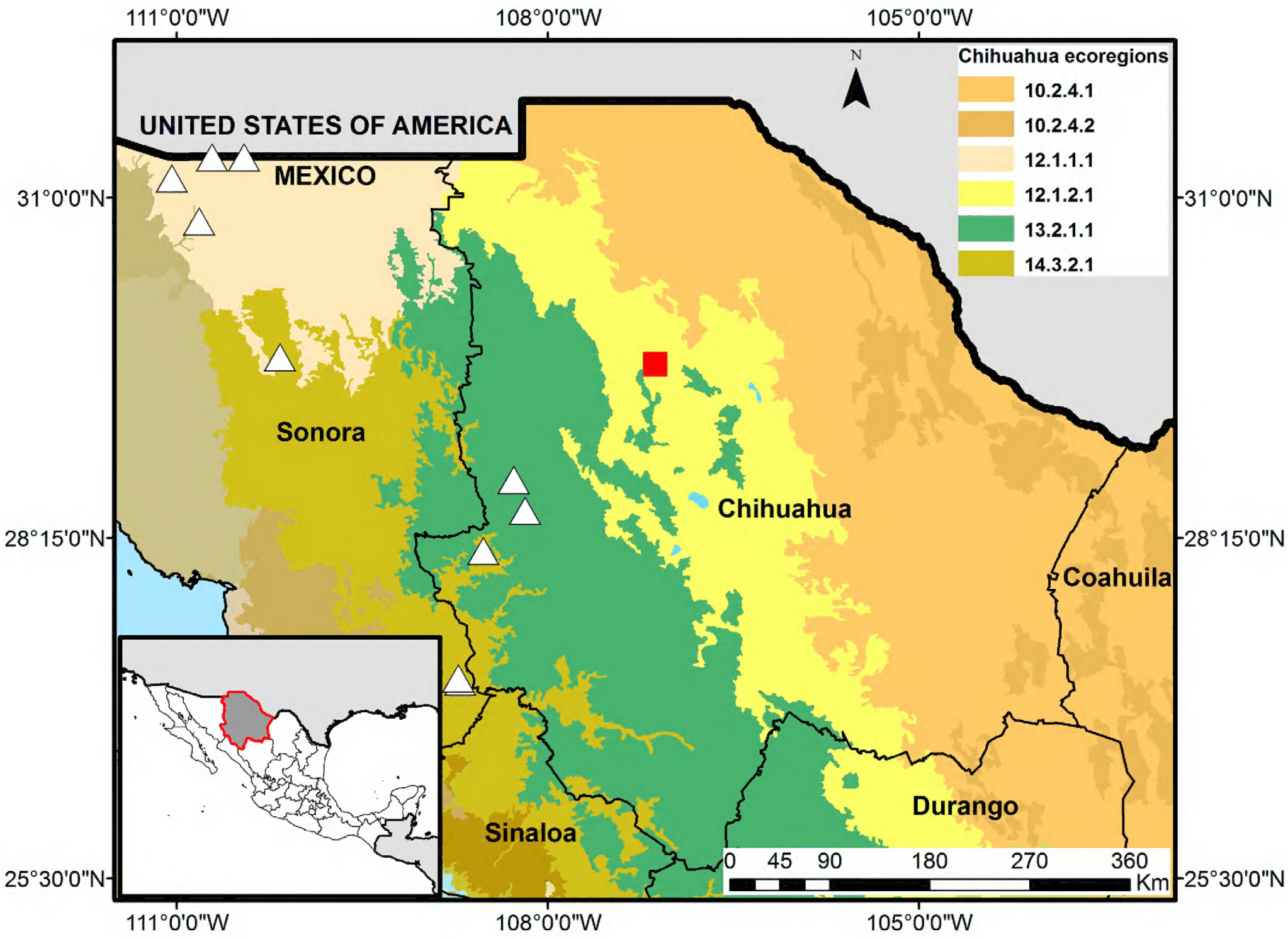

Figure 1. Records of *Melanerpes lewis* in the state of Chihuahua and nearby states, northern Mexico. Triangles represent previous known records and square represents a new site record. The level IV ecoregions found in Chihuahua are mentioned only: orange (10.2.4.1) represents Center flatlands of the Chihuahuan Desert; light brown (10.2.4.2) represents Northern Chihuahuan Desert hills; beige (12.1.1.1) represents the hills and flatlands with xeric scrub, grasslands, and isolated elevations with oak and conifer forest; yellow (12.1.2.1) represents the Foothills and Plains with grasslands, xerophytic scrub and conifer oak forests; green (13.2.1.1) represents Hills and Mountain Ranges with conifer, oak and mixed forests; olive-green (14.3.2.1) represents Mountain ranges with conifer, oak and mixed forests.

study area is the Santa Clara River, a riparian corridor bordered by tall tress such as cottonwoods (*Populus* sp.) and oaks (*Quercus* sp.).

On 11–12 January 2014, we observed and photographed a single adult, Lewis's Woodpecker, in a riparian-grassland corridor at La Regina, Buenaventura Municipality, Chihuahua. Identification was based on several field marks: head and upperparts glossy greenish black with dark red face, chest silvery white and pinkish red on belly (Howell and Webb, 1995; Figure 2). The bird exhibited the species' typical behavior; its distinctive flycatching habit confirmed the identification, although at times it perches patiently on cottonwoods at the riparian-grassland corridor and occasionally forages on ground. Subsequently, the photos were sent to an expert in Mexican bird identification (H. Gómez de Silva), and he confirmed the record. Only three records exist from Chihuahua: one bird was collected by R. R. Mcleod in the Moris Municipality on 26 December 1884 (28°08′55″N, 108°31′21″W; Miller et al. 1957), one individual was observed by Javier Cruz at Tutuaca (28°28′18″N, 108°10′60″W) on January and February 2003, and possibly the same individual was seen and photographed by Diana Venegas at Conoachic (28°43′15.3″N, 108°16′30.9″W) on April 2003, both in the Temósachic Municipality.

Prior to the 1930s, this species was a fairly common winter visitor in Baja California Peninsula, Mexico (Miller et al. 1957). Lately, Baja California Sur had five site records: one at San Ignacio on 24 October 2001 (first record for Baja California Sur; Erickson et al. 2002); several reported in the winter of 2003, providing the second Baja California record; one at Cataviña on 13 October; up to 6 at Laguna Hanson on 18–20 December; and four at Mulegé on 29 November (Erickson et al. 2004). In Sonora, its seasonal status indicates that it is a relatively regular winter visitor in the northern portion (eBird 2015), with a few exceptional records: lone

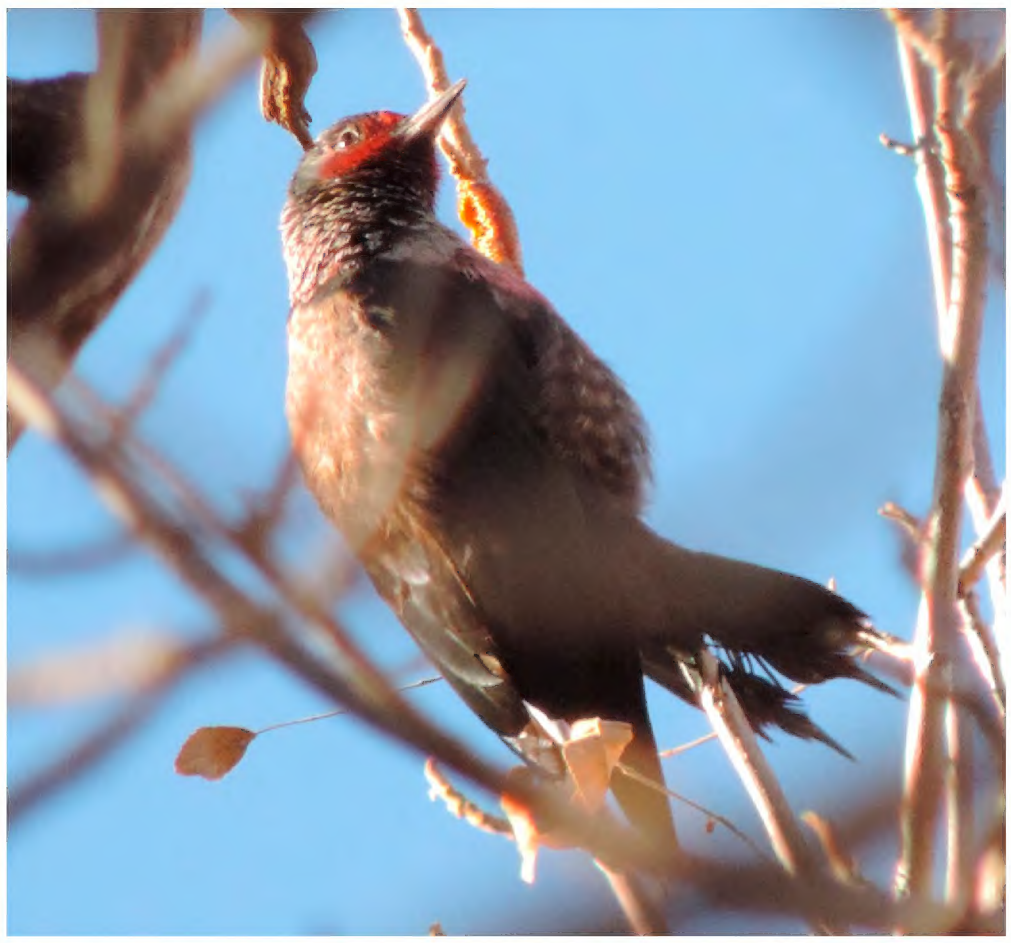

Figure 2. Lewis's Woodpecker, *Melanerpes lewis,* photographed in "Foothills and Plains with grasslands, xerophytic scrub and conifer oak forests ecoregion" at La Regina, Buenavenura Municipality, Chihuahua, northern Mexico, on 12 December 2014. (Photo: I.M.C.).

individuals were seen at Arroyo Santa Barbara on 19 December 1999 (eBird 2015) and 20 March 2001 (Gómez de Silva 2001), and one more at Puerto Peñasco on 30 March 2002 (Gómez de Silva 2002), all records south of its usual range. Likewise, "vagrant birds" have been documented in Nuevo León: one was found at Chipinque Park, Monterrey, on 9 March 2003 and was present through the following week (Gómez de Silva 2003), and another one was recorded at 2800m elevation on Cerro Potosí, Nuevo León on 14 June 2003 (Gómez de Silva 2004). Howell and Webb (1995) mapped a single record (December 1981) in northern Coahuila (without specifying a location record). It is likely that the species is more common than the Mexican records indicate, given this woodpecker realizes latitudinal movements away from its usual range and typical habitat, particularly when food abundance and forage habitat is available during the winter (Winkler et al. 1995). Even though the species is not globally threatened (BirdLife International 2012), it may be mainly negatively affected by urban and agricultural development, firewood cutting and inappropriate livestock grazing (Winkler et al. 1995).

With this record, we confirmed the presence of this species in northern Chihuahua and the Mexican ecoregion level IV "Foothills and Plains with grasslands, xerophytic scrub and conifer oak forests" (INEGI-CONABIO-INE 2008), being the previous ones found mostly in the ecoregions in and near the Hills and Mountain Ranges with conifer, oak and mixed forests; Hills and Flatlands with xeric scrub, grasslands and isolated elevations with oak and conifer forests; and Hills and Plains with xeric scrub and chaparral (see Figure 1). This new record will have significant implications in conservation studies. Ecoregional units have been used over the past few years to define conservation priorities at the global and regional scale, and to protect as many representative areas with special elements as possible so to ensure the survival of populations and ecological processes under a novel study called "gap analysis" (Olson and Dinerstein 2002).

It is important to note that Navarro and Peterson (2007) using GARP algorithm for potential distribution did not map this species for the Chihuahua countryside or elsewhere in eastern Mexico. Hence the record increases our knowledge on the species' wintering distribution and natural history in Mexico.

ACKNOWLEDGEMENTS

We thank the owner and managers of La Regina for allowing us to observe birds. Antonio de la Mora helped with logistical support. We are grateful to Nárgila Gomes Moura for the editorial work and to Héctor Gómez de Silva for confirming the record. This study was funded in part by PROMEP grant 103.5/10/4980 to C.V.G. Thanks go to Universidad Autónoma de Ciudad Juárez (UACJ) and Consejo Nacional de Ciencia y Tecnología (CONACyT) for the supporting grant to I.M.C.

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Author contributions: ATV, CV, and IMC collected the data and wrote the text.

Received: 7 August 2015
Accepted: 31 October 2015
Academic editor: Nárgila Gomes Moura